### **Individual Review Form**

Proposal number: 2001-I201-2 Short Proposal Title: Watershed Education-Headwaters to the Ocean

### 1a) Are the objectives and hypotheses clearly stated?

Yes, the applicant's goal is to increase public involvement and enhanced awareness of local watershed. The project is designed to have considerable public interface and in fact, its success is based upon the assistance of local residents. I particularly liked the project involving local high school students to eradicate invasive species along the river.

### 1b1) Does the conceptual model clearly explain the underlying basis for the proposed work?

The model is fully explained, but success in replicating will depend upon factors that the applicant cannot control like funding issues with outside agencies. However, it appears that the applicant has been successful so far from previous CALFED grants, so the model itself is a proven concept.

### 1b2) Is the approach well designed and appropriate for meeting the objectives of the project?

I liked the multi-dimensional approach to the model. The various restoration, gardening, and educational components compliment one another and can be easily implemented as separate projects. I thought the use of GIS to map non-native species along the river was wonderful use of new technology, use of math, spatial and science skills all in one. The older kids work with specialists and landowners in a cooperative environment. Teenagers often complain that no one takes them seriously and this is great way for them to contribute in a meaningful way and for adults to accept their input. In addition, getting young people involved really sets up a lifetime of memories and attitude awareness for future decision-making.

# 1c1) Has the applicant justified the selection of research, pilot or demonstration project, or a full-scale implementation project?

This is a model for others to follow. The model of experimenting with new ideas and projects allows others to participate from an informed position. The Discovery Center will initiate these new ideas and allow others to replicate. I think the applicant provided a good justification for continuing with their programs from the initial grant.

The discussion of the Bio-Diversity materials was a little confusing to me. The applicant mentions interactive and wall graphics, but I couldn't find any details of what they were to be or how used. Is the video going to be incorporated into an interactive display? I think the video is a nice idea, but not fully explained in its objectives nor delivery systems.

### 1c2) Is the project likely to generate information that can be used to inform future decision-making?

Absolutely, see my answer from #1b2. The public loves to be involved in "real world" work that makes a difference to their environment. The teenagers will see their efforts pay off from a very real perspective.

The gardening and restoration projects will include a large public component and the demonstration garden will provide useful and practical information. Informed public will be able to understand the complex water issues they read or hear about and form reasoned opinions instead of buying into a emotional or one-sided discussion.

## 2a) Are the monitoring and information assessment plans adequate to assess the outcome of the project?

I thought this was the weakest element in the applicant proposal. I really had to hunt for information on assessment of various programs and could only find mention of class sizes and registration numbers as a monitoring technique. While these are useful tools, they don't provide an adequate assessment of impact, success or validation of objectives. There might be more to evaluating the programs, but it wasn't discussed.

The applicant might consider hiring an evaluator to design a monitoring/evaluation program that could easily be implemented by those coordinating each program component.

# 2b) Are data collection, data management, data analysis, and reporting plans well-described, scientifically sound and adequate to meet the proposed objectives?

Data will be compiled on the various audiences participating, registration numbers, calls for information, completed products, etc. Good collection of materials and feedback mechanisms, but not much detail on how the various elements will be assembled into a meaningful monitoring/evaluation package.

See response from 2a).

### 3) Is the proposed work likely to be technically feasible?

Yes, the applicant has already received a prior CALFED grant and this proposal is a continuation of programs initiated under the first grant. The various components have experienced good feedback and enjoyed participation from the public with demands for more. The Bio-Diversity videos are certainly feasible and a number of outside visitor centers are committed to using them. However, the interactive/wall graphics elements were not included to evaluate.

#### 4) Is the proposed project team qualified to efficiently and effectively implement the proposed project?

The only vita included was that of the Director, a very well qualified person, but she can't do it all. I am concerned that one individual will be able to coordinate all programs adequately. If others are available to assist, they were not included in the proposal. Teachers or volunteers that plan to coordinate should have been included as they will play a big role in implementing the various programs.

Overall Evaluation Summary Rating				
	Excellent Very Good Good Fair Poor	VERY GOOD		

### Provide a brief explanation of your summary rating:

I give this proposal a VERY GOOD rating. I suspect that the applicant has more developed plans for implementation than what the proposal indicated because these are continuations and expansions of existing programs. The budget was well developed and reasonable in its breakdown for tasks. The various programs make a good connection of watershed issues from headwaters to the ocean. I think this holistic approach is critically needed as it encompasses the "big picture" of water in the state. To dissect watercourses into separate components allows for in depth study, but ignores the full story of water movement, changes to watersheds over distance and terrain and human impacts. The biodiversity videos will reach a wide audience, but the idea was not fully expanded in the proposal to know how the videos would be used. Mention of wall graphics and interactives, but no details. Do the videos have teaching guides or curricula included?

Since this is a request to continued work under a previous CALFED, I would support it's continuation despite some lack of details in this application. These are good ideas and need time and continuity to fully develop into long-term programs.